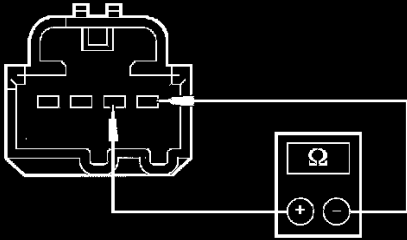
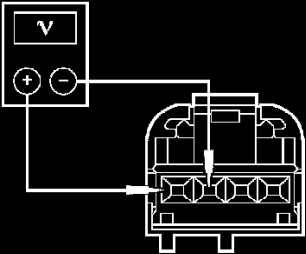


Heating and Air Conditioning: Pinpoint Tests

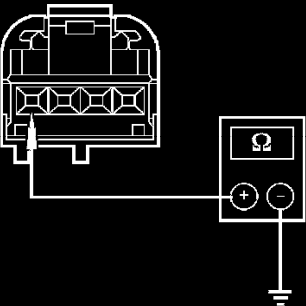
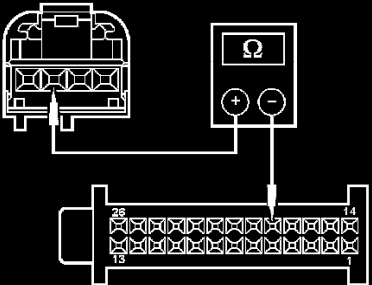
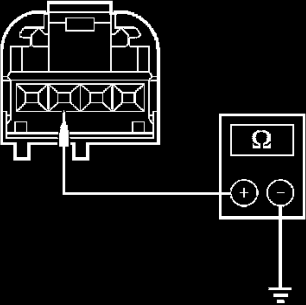
Test C: DTC B2796 or DTC B2795 - LH A/C Solar Radiation Sensor Open Circuit or Short to Ground

PINPOINT TEST C: DTC B2796 OR DTC B2795 - LH A/C SOLAR RADIATION SENSOR OPEN CIRCUIT OR SHORT TO GROUND

PINPOINT TEST C: DTC B2796 OR DTC B2795 — LH A/C SOLAR RADIATION SENSOR OPEN CIRCUIT OR SHORT TO GROUND		
Test Step		Result / Action to Take
C1	CHECK THE SOLAR RADIATION SENSOR RESISTANCE <ul style="list-style-type: none"> Key in OFF position. Disconnect: Solar Radiation Sensor C286. Measure the resistance between the solar radiation sensor (C286) terminals 3 and 4, component side.  <p>N0003137</p> <ul style="list-style-type: none"> Is continuity present and the resistance greater than 0 ohms? 	<p>Yes GO to C2.</p> <p>No INSTALL a new solar radiation sensor. CLEAR the DTCs. REPEAT the self-test. TEST the system for normal operation.</p>
C2	CHECK THE SOLAR RADIATION SENSOR REFERENCE VOLTAGE <ul style="list-style-type: none"> Key in ON position. Press the AUTOMATIC button. Measure the voltage between solar radiation sensor C286-3, circuit 468 (BN) and C286-4, circuit 1205 (BK).  <p>N0003138</p> <ul style="list-style-type: none"> Is the voltage between 4.7 and 5.1 volts? 	<p>Yes GO to C6.</p> <p>No If diagnosing DTC B2796, GO to C3. If diagnosing DTC B2795, GO to C5.</p>
C3	CHECK CIRCUIT 1205 (BK) FOR AN OPEN <ul style="list-style-type: none"> Key in OFF position. 	

(Continued)

PINPOINT TEST C: DTC B2796 OR DTC B2795 — LH A/C SOLAR RADIATION SENSOR OPEN CIRCUIT OR SHORT TO GROUND (Continued)

Test Step		Result / Action to Take
C3	CHECK CIRCUIT 1205 (BK) FOR AN OPEN (Continued)	
<ul style="list-style-type: none"> Measure the resistance between solar radiation sensor C286-4, circuit 1205 (BK) and ground.  <p>N0003139</p> <ul style="list-style-type: none"> Is the resistance less than 5 ohms? 		<p>Yes GO to C4.</p> <p>No REPAIR circuit 1205 (BK) for an open. CLEAR the DTCs. REPEAT the self-test. TEST the system for normal operation.</p>
C4	CHECK CIRCUIT 468 (BN) FOR AN OPEN	
<ul style="list-style-type: none"> Disconnect: EATC Module C228b. Measure the resistance between EATC module C228b-18, circuit 468 (BN) and solar radiation sensor C286-3, circuit 468 (BN).  <p>N0003140</p> <ul style="list-style-type: none"> Is the resistance less than 5 ohms? 		<p>Yes GO to C6.</p> <p>No REPAIR circuit 468 (BN) for an open. CLEAR the DTCs. REPEAT the self-test. TEST the system for normal operation.</p>
C5	CHECK CIRCUIT 468 (BN) FOR A SHORT TO GROUND	
<ul style="list-style-type: none"> Key in OFF position. Disconnect: EATC Module C228b. Measure the resistance between solar radiation sensor C286-3, circuit 468 (BN) and ground.  <p>N0003141</p> <ul style="list-style-type: none"> Is the resistance greater than 10,000 ohms? 		<p>Yes GO to C6.</p> <p>No REPAIR circuit 468 (BN) for a short to ground. CLEAR the DTCs. REPEAT the self-test. TEST the system for normal operation.</p>

(Continued)

PINPOINT TEST C: DTC B2796 OR DTC B2795 — LH A/C SOLAR RADIATION SENSOR OPEN CIRCUIT OR SHORT TO GROUND (Continued)

Test Step		Result / Action to Take
C6	CHECK MODULE CONNECTION	
	<ul style="list-style-type: none"> • Carry out the Electronic Automatic Temperature Control (EATC) Module and Electronic Manual Temperature Control (EMTC) Module Cold Boot Process. • Carry out the EATC on-demand self test. • Operate the system. • Does the concern return? 	<p>Yes INSTALL a new EATC module. TEST the system for normal operation.</p> <p>No The system is operating correctly at this time. The concern may have been caused by a loose or corroded connector. CLEAR The DTCs. REPEAT the self-test. TEST the system for normal operation.</p>

C6
Normal Operation

Under normal operation, the solar radiation sensor receives a ground through circuit 3051 (BK/YE). A **5-volt** reference voltage is supplied to the solar radiation sensor from the EATC module through circuit 468 (BN).

Possible Causes

- An open in circuit 3051 (BK/YE) or 468 (BN)
- A short to ground in circuit 468 (BN)
- Solar radiation sensor
- EATC module